

NSF BIOGRAPHICAL SKETCH

NAME: O'Neil-Dunne, Jarlath

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POSITION TITLE & INSTITUTION: Director, Spatial Analysis Laboratory, University of Vermont

(a) PROFESSIONAL PREPARATION

INSTITUTION	LOCATION	MAJOR / AREA OF STUDY	DEGREE (if applicable)	YEAR YYYY
University of New Hampshire	Durham, NH	Forest Science	BS	1996
National Geospatial Intelligence College	Fort Belvoir, VA	Certificate in Hyperspectral Data Exploitation	Resident	2002 - 2002
National Geospatial Intelligence College	Fort Belvoir, VA	Certificate in Geospatial Operations	Other training	2002 - 2002
University of Vermont	Burlington, VT	Water Resources	MS	2005
University of Vermont	Burlington, VT	Certificate in Leadership & Management	Other training	2014 - 2014

(b) APPOINTMENTS

2012 - present Director, Spatial Analysis Laboratory, University of Vermont, Burlington, VT

2012 - present Faculty Research Associate, University of Vermont, Burlington, VT

2008 - 2012 Research Analyst, University of Vermont, Burlington, VT

2004 - 2008 Research Specialist, University of Vermont, Burlington, VT

2000 - 2004 Graduate Research Assistant, University of Vermont, Burlington, VT

1996 - 2008 Officer (Active & Reserve Duty), United States Marine Corps, Various

(c) PRODUCTS

Products Most Closely Related to the Proposed Project

1. Johnson KD, Birdsey R, Cole J, Swatantran A, O'Neil-Dunne J, Dubayah R, Lister A. Integrating LIDAR and forest inventories to fill the trees outside forests data gap. *Environ Monit Assess.* 2015 Oct;187(10):623. PubMed PMID: [26364065](#).
2. Schwarz K, Fragkias M, Boone CG, Zhou W, McHale M, Grove JM, O'Neil-Dunne J, McFadden JP, Buckley GL, Childers D, Ogden L, Pincetl S, Pataki D, Whitmer A, Cadenasso ML. Trees grow on money: urban tree canopy cover and environmental justice. *PLoS One.* 2015;10(4):e0122051. PubMed PMID: [25830303](#); PubMed Central PMCID: [PMC4382324](#).
3. Schwartz A, Dodds P, O'Neil-Dunne J, Danforth C, Ricketts T. Visitors to urban greenspace have higher sentiment and lower negativity on Twitter. *People and Nature.* 2019 August 19; 1(4):476-485. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/pan3.10045> DOI: 10.1002/pan3.10045
4. Huang W, Swatantran A, Duncanson L, Johnson K, Watkinson D, Dolan K, O'Neil-Dunne J, Hurtt G, Dubayah R. County-scale biomass map comparison: a case study for Sonoma, California. *Carbon*

Management. 2017 November 28; 8(5-6):417-434. Available from:
<https://www.tandfonline.com/doi/full/10.1080/17583004.2017.1396840> DOI:
10.1080/17583004.2017.1396840

5. Huang W, Dolan K, Swatantran A, Johnson K, Tang H, O'Neil-Dunne J, Dubayah R, Hurtt G. High-resolution mapping of aboveground biomass for forest carbon monitoring system in the Tri-State region of Maryland, Pennsylvania and Delaware, USA. *Environmental Research Letters*. 2019 August 21; 14(9):095002-. Available from: <https://iopscience.iop.org/article/10.1088/1748-9326/ab2917> DOI: 10.1088/1748-9326/ab2917

Other Significant Products, Whether or Not Related to the Proposed Project

1. Locke DH, Polsky C, Grove JM, Groffman PM, Nelson KC, Larson KL, Cavender-Bares J, Heffernan JB, Chowdhury RR, Hobbie SE, Bettez ND, Hall SJ, Neill C, Ogden L, O'Neil-Dunne J. Residential household yard care practices along urban-exurban gradients in six climatically-diverse U.S. metropolitan areas. *PLoS One*. 2019;14(11):e0222630. PubMed PMID: [31721782](https://pubmed.ncbi.nlm.nih.gov/31721782/); PubMed Central PMCID: [PMC6853287](https://pubmed.ncbi.nlm.nih.gov/pmc/articles/PMC6853287/).
2. Polsky C, Grove JM, Knudson C, Groffman PM, Bettez N, Cavender-Bares J, Hall SJ, Heffernan JB, Hobbie SE, Larson KL, Morse JL, Neill C, Nelson KC, Ogden LA, O'Neil-Dunne J, Pataki DE, Chowdhury RR, Steele MK. Assessing the homogenization of urban land management with an application to US residential lawn care. *Proc Natl Acad Sci U S A*. 2014 Mar 25;111(12):4432-7. PubMed PMID: [24616515](https://pubmed.ncbi.nlm.nih.gov/24616515/); PubMed Central PMCID: [PMC3970529](https://pubmed.ncbi.nlm.nih.gov/pmc/articles/PMC3970529/).
3. Lovasi GS, O'Neil-Dunne JP, Lu JW, Sheehan D, Perzanowski MS, Macfaden SW, King KL, Matte T, Miller RL, Hoepner LA, Perera FP, Rundle A. Urban tree canopy and asthma, wheeze, rhinitis, and allergic sensitization to tree pollen in a New York City birth cohort. *Environ Health Perspect*. 2013 Apr;121(4):494-500. PubMed PMID: [23322788](https://pubmed.ncbi.nlm.nih.gov/23322788/); PubMed Central PMCID: [PMC3620770](https://pubmed.ncbi.nlm.nih.gov/pmc/articles/PMC3620770/).
4. Cadenasso ML, Pickett ST, Groffman PM, Band LE, Brush GS, Galvin MF, Grove JM, Hagar G, Marshall V, McGrath BP, O'Neil-Dunne JP, Stack WP, Troy AR. Exchanges across land-water-scape boundaries in urban systems: strategies for reducing nitrate pollution. *Ann N Y Acad Sci*. 2008;1134:213-32. PubMed PMID: [18566096](https://pubmed.ncbi.nlm.nih.gov/18566096/).
5. Troy AR, Grove JM, O'Neil-Dunne JP, Pickett ST, Cadenasso ML. Predicting opportunities for greening and patterns of vegetation on private urban lands. *Environ Manage*. 2007 Sep;40(3):394-412. PubMed PMID: [17602257](https://pubmed.ncbi.nlm.nih.gov/17602257/).

(d) SYNERGISTIC ACTIVITIES

1. Geospatial Video Tutorials - a collection of publicly accessible online geospatial tutorial videos that have collectively garnered over 150,000 views.
2. AmericaView Board of Directors - leadership position in an organization dedicated to remote sensing research, education, and outreach.
3. Federal Emergency Management Agency (FEMA) Region 1 Unmanned Aircraft Systems (UAS) advisory board member.